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ABSTRACT OF THE DISCLOSURE

Communication traffic associated with one or more mobile terminals is monitored to efficiently manage allocated radio resources. A rate management technique dynamically adjusts allocated radio resources to increase or decrease the data rate capacity of allocated radio channels based on actual channel usage. In this manner, radio resources are more efficiently utilized because the amount of excess capacity allocated to individual subscribers is reduced. Monitoring communication traffic may also be used to determine whether additional radio channel resources are allocated to a given subscriber. For example, in a cdma2000 radio access network, subscribers are typically allocated fundamental radio channels and then assigned supplemental channels to access higher data rate services. By monitoring fundament channel traffic characteristics, such as the queue length or packet size of outgoing packet data, the radio access network can determine whether supplemental channel allocation is warranted.